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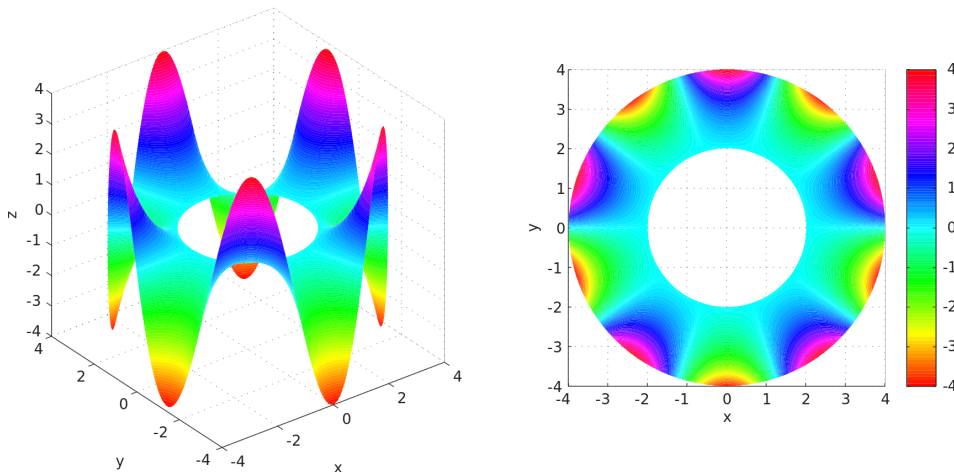


Block Seminar
– Winter Semester 2018/19 –

Linear elasticity

—for Beginners and at Intermediate Level—

3 ECTS / LP



Target Audience

This course addresses students of engineering sciences, physics, mechanical engineering, and similar university courses.

Educational objectives

This course sets the foundation for quantitative assessment of safe engineering constructions. The following points are treated: Necessary tensor notation, linear strain tensor and SAINT-VENANT's dependencies, CAUCHY stress tensor, constitutive law in linear theory of elasticity (isotropic homogeneous HENCKY medium, generalized HOOKE's law), governing relationships in the linear theory of elasticity (in terms of displacements and forces), SAINT-VENANT's problem (problem statement, torsion), three-dimensional problems

Course procedure and exam regulations

In the first lecture, the schedule of the course and the exam regulations are detailed.

Dates

The *first* lecture is Wednesday, 17.10.2018, 10:00–12:00, room MA 642